

RFP B3404RFP009-3X

Questions & Answers

June 9, 1999

Cover Letter

COV-1. **Reference:** Cover letter, page 2, paragraph 4

Question: This paragraph states: "This could take the form of the University working with the selected company to develop and provide certain features under a separate arrangement, the University subcontracting directly to a third party, or the University developing these features in-house." This is inconsistent with the Model Subcontract, Article 26 which states: "Any joint collaborative activities shall be described in writing prior to their commencement, and a modification to the Subcontract issued to incorporate any such agreements."

This Offeror intends to propose all collaborative activity and applicable terms and conditions under a separate subcontract, consistent with the University's stated intent in the RFP cover letter.

Response: The University does not believe the two sections referenced above are inconsistent. The contractual vehicle used for joint collaborative activities will be determined on a case-by-case basis and depend upon such factors as the specific nature of the collaboration contemplated, the level of effort required, associated intellectual property issues, the applicability of any DOE Advance Waiver, etc. This could take the form of a separate arrangement as suggested in the above comment, or be included in the 30 TeraOPS subcontract as has been done for both existing ASCI Blue subcontracts, or via some other contractual vehicle that has not yet been identified. The stated intent of the above referenced paragraph is to communicate the University's willingness to assume some of the responsibility associated with meeting the needs of the ASCI program, and not to restrict the contractual method by which this goal is achieved. The selected Offeror's willingness to enter into unique partnering relationships to support the ASCI program will be critical to the ultimate success of all parties.

Attachment 1 - Descriptive Information

No questions at this time

Attachment 2 - Functional Requirements

A2-1 **Question:** The Offeror shall be responsible for providing an interconnect fabric that allows application codes to scale over the entire system. The fabric for the Final System shall have an end-to-end MPI ping-pong latency from any SMP to any other SMP of 15 microseconds or less, and an SMP aggregate bandwidth of no less than .05

bytes/second/peak OP/second/SMP. For any Interim System, the fabric shall have an end-to-end MPI ping-pong latency from any SMP to any other SMP of 20 microseconds or less, and an SMP aggregate bandwidth of no less than .05 bytes/second/peak OP/second/SMP."

Please clarify the meaning of "SMP aggregate bandwidth" as measured by the ratio of bytes/second/peak OP/second/SMP, as used in the above referenced section number as well as the table on p. 5.

Response: This pertains to the system interconnect fabric, that is, the interface cards in each SMP and the switch or switches (if present) that interconnect all of the SMPs to each other. The "SMP aggregate bandwidth" refers to the sum of the peak uni-directional bandwidths of those interface cards that reside on an individual SMP.

A2-2 **Reference:** Attachment 2, Appendix A, Section 3, Acceptance Test

Question: Item 6 references Special Provisions Clause F.34. Section F of the subcontract does not appear to be part of the RFP package. Can you provide Section F?

Response: Section F, Special Provisions, of the subcontract begins on page 5 of the hard copy of RFP Attachment 5, Model Subcontract. However, there is a typographical error in Attachment 2, Appendix A, Acceptance Test, subparagraph 6, referenced above. The correct reference in that paragraph should be "General Provisions, Clause C9 (Inspection of Supplies)".

A2-3 **Question:** Item 30 in Attachment 2 states that the Offeror shall provide the current version of the Open Software Foundation (OSF) Distributed File Systems (DFS) clients and Distributed Computing Environment (DCE) clients. This vendor believes that *Product A [specific product name intentionally omitted]* will, by the delivery date of the 30T system, provide functionality and capabilities beyond what DFS will offer and intends to support *Product A* on its future platforms. The RFP states that the vendor must provide the "features or capabilities" identified in Attachment 2. This vendor believes that *Product A* will meet and exceed this requirement. Will LANL view *Product A* as an acceptable solution to the requirement of Item 30 in Attachment 2?

Response: Offerors may propose other products, in addition to DCE and DFS, as an alternative or option for the University's consideration, however, interoperability with DCE and DFS servers at Los Alamos and the other national laboratories must be provided. The requirement as stated in Item 30, Attachment 2, remains unchanged.

Attachment 3 - Proposal Preparation Instructions

A3-1 **Question:** Section G.4 states "Offerors must use either 8-1/2-inch by 11-inch overhead slides or Microsoft PowerPoint to provide visual support of their presentations."

"All Offerors must submit their slides, or the electronic media containing their PowerPoint presentation, and 10 sets of paper copies to the University no later than 4:30 p.m. Mountain Time, twenty-one (21) calendar days after the proposal due date."

Please allow the submission and use of PDF files for the presentation --like you have for the proposal.

Response: Submission of oral presentation files in PDF format is acceptable.

A3-2 **Question:** Please clarify the requirement in Attachment 3 to include the Appendix A matrices both in the Section 1, Overview and Section 3, Final Switchable System (Secure/Open).

Please clarify Attachment 3 B.3.f Timeline and Block Diagrams. "provide the same timeline and block diagrams information identified in section B.2.c(5) above." - there is no reference to block diagrams in B.2.c(5).

Response: The RFP requires two stand-alone Final System configurations - one for a *secure* Final System and a second proposal for a *switchable (secure/open)* Final System. The system configuration, architecture, and features of the proposed *secure* Final System will likely be different than the system configuration, architecture, and features for the proposed *switchable (secure/open)* system. It is for that reason that Matrices 1 and 2 are required in both Section B.1.b. and Section B.3.a. of Attachment 3.

Revise section B.3.f. to read as follows:

f. Timeline

Provide the same timeline information identified in section B.2.c(5) above.

Attachment 4 - Evaluation Criteria

No questions at this time

Attachment 5 - Model Subcontract

A5-1 **Reference:** Model Subcontract, Section G - General Provisions
Article C5, Default
Article C9, Inspection of Supplies
Article C21, Termination for Convenience

Question: These clauses are inconsistent with customary commercial practices and the Contract Terms and Conditions - Commercial Items clause of the Federal Acquisition regulations - FAR 52.212-4.

a) Article C5, Default, contains such onerous provisions as cost to cover, wherein should the ASCI subcontractor default, the subcontractor would be liable for the additional cost of another Contractor performing the remaining obligations under the Contract. In fact, this could mean that the subcontractor could be placed in a position of funding a competitor or another developer to complete product development. This clause is not applicable to this type of a Contract wherein the subcontractor will be

providing commercial products. Termination terms should be consistent with the intent of the Contract.

The Government will be receiving value for monies provided up until any point if there is Subcontractor default. Payment will only be made for deliverables that are delivered. No payments will be made for non-performance.

We request incorporation of FAR 52.212-4(m), Termination for Cause, in lieu of this clause.

b) Article C9, Inspection of Supplies. This clause is inconsistent with customary commercial practices and contract terms and conditions for commercial items.

This is not an inspection clause for COTS items. Since we do not build to order, we do not have the capability to identify specific products ordered by LANL on the assembly line and set them aside for inspection by the Government. All products will go through acceptance testing at the Government site and thereafter include a 1 year warranty. Therefore, a clause of this type is not only not applicable, but also unnecessary.

We request incorporation of FAR 52.212-4(a), Inspection/Acceptance in lieu of this clause.

c) Article C21, Termination for Convenience. Consistent with contract terms and conditions for Commercial Items, we request incorporation of FAR 52.212-4(l), Termination for the Government's Convenience, in lieu of this clause.

Response: The Laboratory's standard terms and conditions contained in University Form 7500, General Provisions, have been established to satisfy the University's Prime Contract with the DOE and are subject to DOE approval. No waiver of these previously approved clauses (i.e. Form 7500 Articles C5, C9, and C21) is anticipated. Therefore, the General Provisions identified in Section G of the Model Subcontract remain unchanged.

Sample Applications

APPS-1 **Question:** Is the use of KCC a requirement for the LINAC benchmark? Why the question is being asked: According to the http://www.acl.lanl.gov/30TeraOpRFP/SampleApps/limited/linac/linac_readme.html Building Issues section

```
conf KAI OPTIMIZE MPI USE_SIMPLE_RNG
```

is to be run in the r1 directory as part of the benchmark. That section also says to

```
setenv POOMA_ARCH O2K64
```

if you are running on an SGI Origin 2000. The KAI in the conf line along with the \$POOMA_ARCH setting causes the Makefile to reference the KCC compiler from Kuck

and Associates to do the compilation. We don't have the KCC compiler on our systems. If I delete the KAI part of the conf line and just use

```
conf OPTIMIZE MPI USE_SIMPLE_RNG
```

it uses the regular C++ compiler CC. Is that an acceptable alternative?

If I indeed do that and proceed through the (translated) other directions in `linac_readme.html`, it results in a `linac.out` file (referred to in the Expected Results section) that is very close to the provided `reference.out` file. The Expected Results section talks about a `reldiff.out` file. That isn't produced by the run or referenced in any source or data files. Instead the run produces `reldiff.1`, `reldiff.2`, and `reldiff.3` files which I take it to be what the Expected Results section meant to discuss when it discussed `reldiff.out`. Then again, maybe the `linac_src.tar.gz` file contained in the

<http://www.acl.lanl.gov/30TeraOpRFP/SampleApps/limited/linac/linac.tar>

file isn't the correct source. The last bullet in the Building Issues section refers to a "linac_src" directory. That directory isn't in the `linac_src.tar.gz`; the "linac" directory is.

Response: This example shows using the KAI C++ compiler. You are encouraged to attempt to compile this code with your native C++ compiler. Running `conf` with no arguments will show a list of platforms for which POOMA comes preconfigured, and new ones may be added. Please contact us, via e-mail at sampleapps@lanl.gov if you have difficulty configuring the system for an unrecognized platform. The Linac tar file has been updated.